

[0093] A method and system is provided for detecting the depth of anesthesia wherein at least one anesthetic agent is absorbed in a patient's bloodstream during the administration of anesthesia, which includes sampling a patient's expired breath; analyzing the breath for concentration of at least one substance indicative of the anesthetic agent using sensor technology such as free (unmetabolized) anesthetic agent or its metabolites; determining the effect of the agent based on that concentration; and determining depth of anesthesia based thereon. The method also detects endogenous compounds such as ketones and ammonia in exhaled breath as well as other pathologic organisms.